

IN THE UNITED STATES CIRCUIT COURT  
SOUTHERN DISTRICT OF NEW YORK

AMERICAN GRAPHOPHONE COMPANY, )  
Complainant, )  
vs. ) IN EQUITY  
NATIONAL PHONOGRAPH COMPANY )  
and ) : Smith Patent No. 881,831  
BLACKMAN TALKING MACHINE COMPANY, )  
Defendants. )

- AFFIDAVIT OF THOMAS A. EDISON -

State of New Jersey, )  
County of Essex. ) : ss.:

THOMAS A. EDISON, being duly

sworn, deposes and says:-

I reside at Llewellyn Park, Orange, New Jersey, and am an inventor. I invented the phonograph upward of thirty years ago and have devoted a large part of my time since then to devising improvements upon the same, and have taken out a large number of patents upon these improvements. One of the early structures which I devised was a reproducer in which the reproducer stylus was mounted upon one end of a lever, which lever was pivoted to a weight, which weight was, in turn, pivoted to the body of



the reproducer, the other end of the stylus lever being connected to the diaphragm. This reproducer was covered by my United States patent No. 430,278, and went into very extensive use. During the experimentation which preceded the filing of the application upon which this patent was granted, it was perfectly clear to me that the stylus must have lateral play in order to accommodate itself to irregularities or deviations of the record groove; also that the stylus must be capable of bodily movement towards and from the axis of the record cylinder so as to accommodate itself to the eccentricities of the cylinder; and also that the stylus must be weighted so as to be held down to its work. All this is explained in the patent to which I have referred, the floating weight applying the necessary pressure to the stylus and at the same time permitting it to move to take care of the eccentricities of the record cylinder, and the lateral play of the stylus is provided for by making the opening in the lever considerably larger than the pin upon which the lever vibrates. This patent covered broadly the "floating weight" type of reproducer which has been used very extensively up to the present time by the licensees under this patent and after its expiration, by our competitor, the American Graphophone Company.

Prior to the filing of the application upon which this patent was granted, I experimented with various mountings for the stylus lever which would permit it to move laterally with respect to the floating weight. One of these structures consisted of a swivel which oscillated on a vertical axis with respect to the floating weight



and to which the stylus lever was pivoted, the structure being shown in the accompanying sketch marked "Edison Swivel Reproducer". I had several of these reproducers made at my laboratory in West Orange, New Jersey, about this time, which was probably in 1888 or 1889. They were made by Fred Ott, who was employed by me as an instrument maker for the purpose of making phonograph reproducers and other instruments and mechanisms. These reproducers were tried upon phonograph records and operated very successfully. I found, however, that it was not necessary to use this swivel, as the structure shown in this patent No. 430,278 operated perfectly, and as it was much simpler and cheaper to manufacture, I decided not to use the swivel. I considered the latter a mechanical equivalent for the form shown in this patent and did not illustrate it in the patent, although my claims covered it. I have never found it necessary to mount the stylus lever on a swivel for reproducers operating upon records having 100 threads per inch, which have been the only records put out commercially from the early days until the Amberol records having 200 threads per inch were put out by the National Phonograph Company in October 1908.

It was, however, from the earliest times found necessary to use swivel mountings for the stylus levers in the duplicating machines, probably because the duplicating of a phonograph record is a much more difficult proposition than the reproducing of a record, and requires greater mechanical perfection and accuracy in the moving



parts. Therefore, it has been the practice to mount the reproducer stylus on a swivel in all duplicating machines.

Commercial duplicates at the present time are made by a casting or molding operation, but formerly they were made by mechanical transference in a duplicating machine. These machines usually comprised two mandrels rotating on parallel axes, one mandrel carrying a master record and the other a blank to be made into a record. Between the master record and the blank was a lever or system of levers, one of which carried a reproducer stylus for tracking the record on the master cylinder, and another a recording stylus for cutting in the blank a record, which, of course, would be a duplicate of that on the master, since the movements of the recording stylus corresponded exactly to those of the reproducer stylus. In all these machines which were used in large numbers by the Edison Phonograph Works for the production of commercial phonograph records which were sold throughout the United States in very large numbers from about 1891 up to about the present time, the reproducer stylus was mounted upon some kind of a swivel for permitting lateral movement, and this swivel was carried either by a floating weight or by a movable frame to which a weight was applied. These machines were seen by large numbers of employees and visitors to the plant at various times prior to 1901.

I have looked at the drawing of United States patent No. 881,831 to Smith, and I note that the axis upon which the stylus lever oscillates is intersected by



a prolongation of the axis of the swivel member. In defendant's reproducer "Combination K", the axis upon which the reproducer turns is at a substantial distance from the prolongation of the axis of the swivel member. This latter structure is superior to the former in that the stylus lever is more sensitive to lateral movement. This is because there is less friction of the swivel member with respect to its support, due to the fact that the angle through which the swivel member turns with any given movement of the stylus diminishes as the distance of the axis of the swivel member from the axis of the lever increases. In order to make my meaning clearer, I have annexed hereto a sketch marked "Edison Sketch", in which Figure 1 shows the axis of the reproducer stylus intersected by the axis of the swivel, and Figures 2 and 3 show the swivel axis at a substantial distance from the lever axis. The structure of Figure 2 is more sensitive than that of Figure 1 and that of Figure 3 is more sensitive than that of Figure 2.

Thos A. Edison

Sworn to and subscribed before me  
this 25<sup>th</sup> day of July, 1909.

(Seal) Anna R. Klehm

NOTARY PUBLIC, STATE OF NEW JERSEY  
COMMISSION EXPIRES, JUNE, 1913.



UNITED STATES CIRCUIT COURT  
SOUTHERN DISTRICT OF NEW YORK

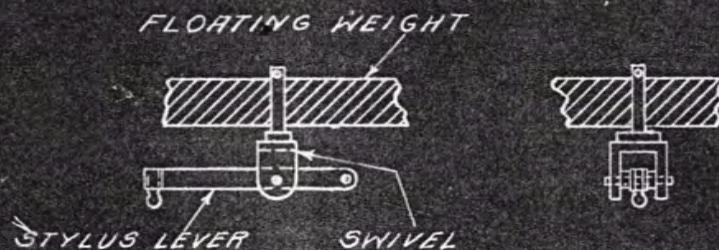
AMERICAN GRAPHOPHONE COMPANY,  
COMPLAINANT,

VS.

NATIONAL PHONOGRAPH COMPANY,  
AND  
BLACKMAN TALKING MACHINE COMPANY,  
DEFENDANTS.

IN EQUITY

DEFENDANTS' EXHIBIT—EDISON SWIVEL REPRODUCER,





IN THE UNITED STATES CIRCUIT COURT  
SOUTHERN DISTRICT OF NEW YORK

AMERICAN GRAPHOPHONE COMPANY,  
Complainant,

VS.

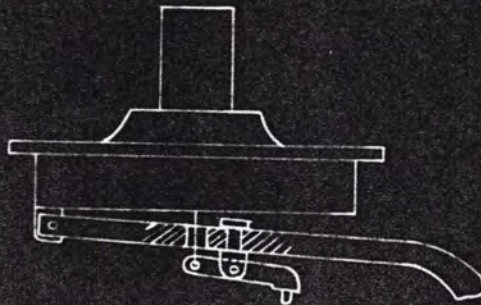
NATIONAL PHONOGRAPH COMPANY  
and  
BLACKMAN TALKING MACHINE COMPANY,  
Defendants

IN EQUITY

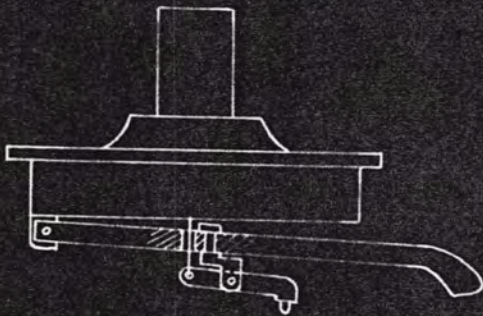
Smith Patent No. 881,831.

Defendants Exhibit - EDISON SKETCH

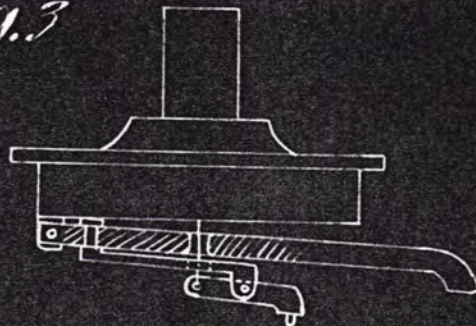
*Fig. 1*



*Fig. 2*



*Fig. 3*





IN THE UNITED STATES CIRCUIT COURT  
SOUTHERN DISTRICT OF NEW YORK

AMERICAN GRAPHOPHONE COMPANY,  
Complainant,

vs.

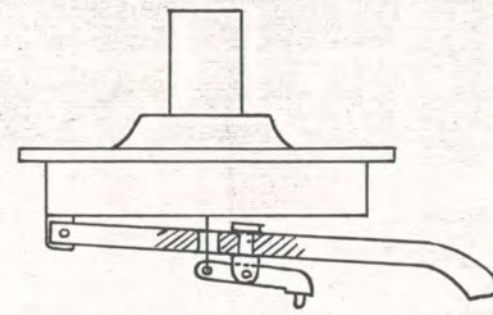
NATIONAL PHONOGRAPH COMPANY  
and  
BLACKMAN TALKING MACHINE COMPANY,  
Defendants.

IN EQUITY

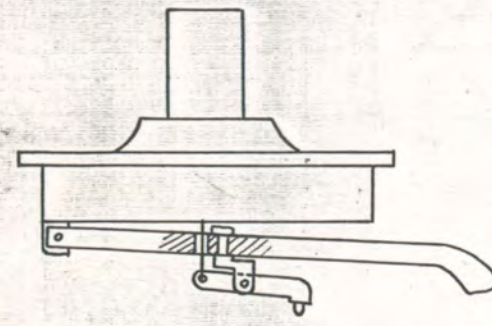
Smith Patent No. 881,831.

Defendants Exhibit - EDISON SKETCH

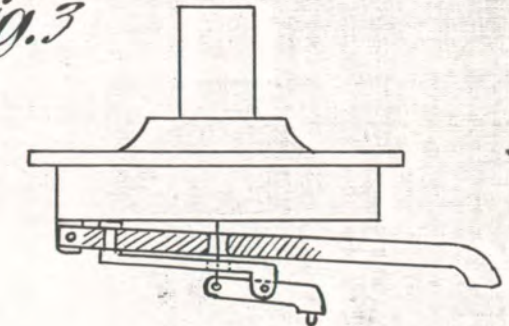
*Fig. 1*



*Fig. 2*



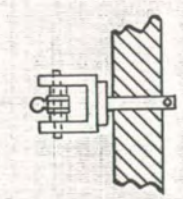
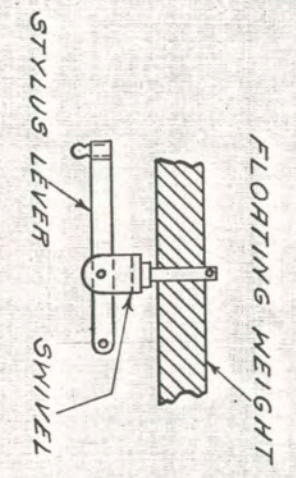
*Fig. 3*



UNITED STATES CIRCUIT COURT  
SOUTHERN DISTRICT OF NEW YORK  
AMERICAN GRAPHOPHONE COMPANY,  
COMPLAINANT,  
vs.  
NATIONAL PHONOGRAPH COMPANY,  
AND  
BLACKMAN TALKING MACHINE COMPANY,  
DEFENDANTS.

IN EQUITY

DEFENDANTS' EXHIBIT — EDISON SWIVEL REPRODUCER.





IN THE UNITED STATES CIRCUIT COURT

SOUTHERN DISTRICT OF NEW YORK

AMERICAN GRAPHOPHONE COMPANY, )  
Complainant, :  
vs. : IN EQUITY  
NATIONAL PHONOGRAPH COMPANY )  
and :  
BLACKMAN TALKING MACHINE COMPANY, )  
Defendants. :  
Smith Patent No. 881,831

- AFFIDAVIT OF ALEXANDER N. PIERMAN -

State of New Jersey,) :  
County of Essex. ) : ss.:

ALEXANDER N. PIERMAN, being duly sworn, deposes and says that he resides at Newark, New Jersey, and is employed by the National Phonograph Company as an experimenter upon phonograph reproducers and other devices. That he has devoted many years to this kind of work and is expert in the construction and operation of phonograph reproducers. That he has made a great many tests with reproducers of the floating weight type in which the stylus lever is pivoted on a member which is swiveled to the floating weight, some of these tests being made with reproducers in which the axis of the stylus lever is intersected by a prolongation of the axis of the swivel,



and others in which there is no such intersection, for instance the "Combination K" reproducer of the National Phonograph Company. The structure last named is a great improvement over the former in the reproduction of records having 200 threads per inch. In the "Combination K" reproducer, the reproducer stylus is much more sensitive and follows the record groove very much better than does the stylus mounted on a lever whose axis is intersected by the axis of the swivel. The two structures referred to are not equivalent as far as 200 thread records are concerned.

Alexander H. Pierman

Sworn to and subscribed before  
me this <sup>25<sup>th</sup></sup> day of July, 1909.

(Seal) Anna R. Kellum

NOTARY PUBLIC, STATE OF NEW JERSEY  
COMMISSION EXPIRES, JUNE, 1913.



IN THE UNITED STATES CIRCUIT COURT  
SOUTHERN DISTRICT OF NEW YORK

AMERICAN GRAPHOPHONE COMPANY }  
Complainant, }  
vs. } IN EQUITY  
NATIONAL PHONOGRAPH COMPANY } On Smith Patent No. 881,831  
and }  
BLACKMAN TALKING MACHINE COM- }  
PANY, }  
Defendants.

- AFFIDAVIT OF WALTER H. MILLER -

State of New Jersey, )  
County of Essex. ) ss.:

WALTER H. MILLER, of legal  
age and a resident of Orange, County of Essex and State  
of New Jersey, being first duly sworn, on oath deposes  
and says as follows:-

I am employed by the National Phonograph Com-  
pany, one of the defendants herein, and have charge of  
the recording of original or master records, from which  
molds are afterwards made for the manufacture of dupli-  
cate records therefrom. I have been engaged in the pho-  
nographic art for upwards of 21 years and am thoroughly  
familiar with all its branches. I have been connected.



with the Edison Phonograph Works, the National Phonograph Company and other companies affiliated therewith for nearly twenty-two years.

Duplicate phonograph records are now made by molding in a metallic mold obtained from an original record. Prior to the adoption of the molding process, duplicate phonograph records were made by means of mechanical duplicating machines, that is to say, machines in which a reproducing stylus was made to track the groove in the master record and to impart the vibrations to a cutting stylus which in turn cut a new groove in a blank cylinder, the product of the operation being known as a cut or engraved duplicate.

Duplicating machines have been used by the Edison Companies, (by which term I mean the defendant, National Phonograph Company and affiliated companies at Orange, New Jersey, including the Edison Phonograph Works) from an early period. My first work upon duplicating machines was about the year 1890 to 1892, at which time I had charge of a duplicating plant of the Edison Phonograph Works at Silver Lake, New Jersey. We had at first four machines at Silver Lake and afterwards six machines, and the duplicating of phonograph records was carried on there to a very considerable extent, and large numbers of cut duplicates were sold. The machines which were used at Silver Lake were designed by me and were constructed for me at the Edison Laboratory at West Orange. I have had a diligent search made for these old machines which, of course have never been used since the manufacture of duplicate



records by molding has been carried on, but have been unable to locate them.

My recollection, however, of the construction and operation of the machines which I designed and which were used at Silver Lake is very clear, and I have had a sketch made illustrating the construction thereof. I herewith introduce the said sketch in evidence and the same is marked "Defendants' Exhibit-Sketch of Silver Lake Duplicating Machine". In this drawing A represents the original or master record in which a record groove had been cut and a duplicate of which it was desired to manufacture. B represents the blank cylinder of wax, in which the duplicate record groove was to be cut. C is a floating weight made of lead and suspended on pivots near its upper end. To this floating weight C was pivoted a reproducer lever D bearing a ball or stylus E which tracked the groove in the original record. A link F connected the opposite end of the stylus lever to a diaphragm G which was fixed in an opening provided for the purpose and which had connected thereto the cutting stylus H. A brass bushing I was inserted in the lead floating weight C, and this bushing had a central aperture for the reception of a pin K to the head of which pin the stylus lever D was pivoted, as shown at J. The pin K was rotatable within the bushing I so as to furnish a swivel support for the stylus lever D and to make it possible for the stylus or ball E to move laterally with respect to the record, so that if it should happen that the groove in the master record should deviate from a true helix this swivel mounting would allow the stylus to follow the groove. A spring L was provided to press the floating weight C toward the



master record and to keep the ball or stylus E at all times within the groove therein, and a lever M was pivoted to the frame for moving the floating weight and the stylus E away from the master record against the tension of the spring L when the record was to be removed or replaced. The screw N was used for the adjustment of the blank cylinder in order that the groove cut by the cutting knife H would be of the proper depth. By the use of the diaphragm Q we were enabled to listen to the record as it was reproduced and by this means could determine when the device was in need of adjustment.

The actual manufacture of duplicate records on these machines at Silver Lake was carried on by a young lady by the name of Julia Miller. She has since been married to Mr. Fred Devenald. The machines were constructed, as I have stated, at the Edison Laboratory, and Fred Ott and John Ott, who were at that time at the Edison Laboratory, know of the construction and operation of these machines. Mr. Fred Ott is a brother-in-law of Mrs. Devenald, and was at the Silver Lake plant quite frequently during the use of these machines and knew all about them.

About 1896, I had charge of the duplicating plant at the Edison Phonograph Works at West Orange, in which we made use of a swiveled reproducer mounted in a floating weight and connected to a cutting stylus. I have examined the sketch put in evidence by Mr. Adolph F. Gall, who has made an affidavit herein, and which is entitled "Defendants' Exhibit-Sketch of Orange Duplicating Machine No. 1", and I have also examined the universally



connected stylus lever and cutting knife put in evidence by Mr. Gall with the title "Duplicating Machine Lever No. 1", and I know and affirm that duplicating machines of the construction shown in sketch No. 1 and having the reproducing and cutting stylus arranged as in the said physical exhibit, were in use to the number of 200 or more at the Edison Phonograph Works at West Orange at that time, and that large numbers of duplicate records made on the said machines were sold. About the year 1897, I discontinued the management of the Duplicating Department and took up the work of recording or making original records, upon which I have since been engaged.

I have, however, made frequent calls at the Works in West Orange and I know and affirm that up to about the year 1902 a large number of duplicating machines of various constructions were used at the Edison Phonograph Works for the manufacture of duplicate cut records, which records were sold in large numbers, and in which duplicating machines the reproducer stylus was mounted on a swivel so that the stylus would follow the groove in the master record notwithstanding lateral deviations therein.

Walter H. Miller

Sworn to and subscribed before  
me this 23rd day of July, 1909.

(Seal) Anna R. Klehm  
NOTARY PUBLIC, STATE OF NEW JERSEY  
COMMISSION EXPIRES, JUNE, 1913.



UNITED STATES CIRCUIT COURT.  
SOUTHERN DISTRICT OF NEW YORK.

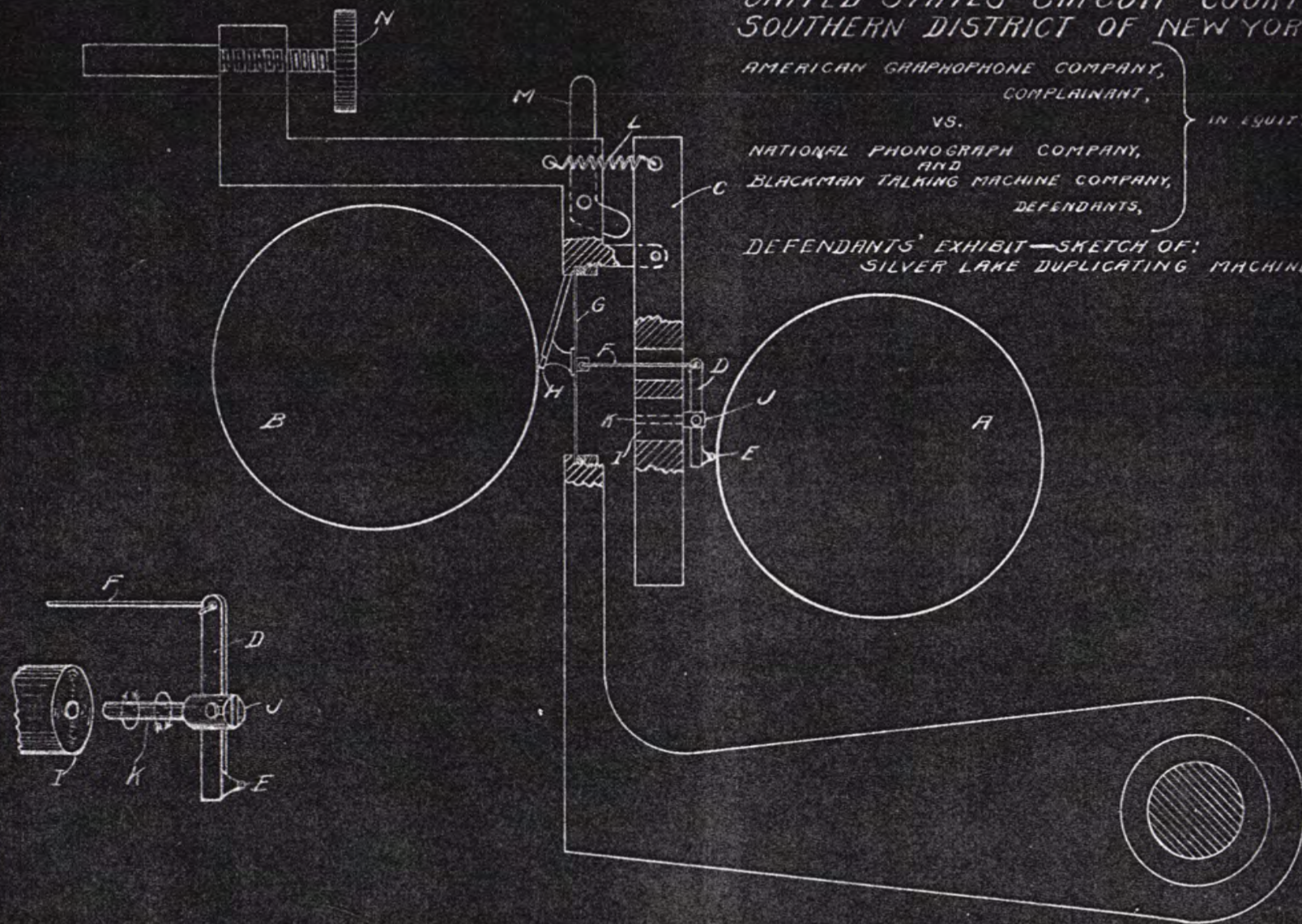
AMERICAN GRAPHOPHONE COMPANY,  
COMPLAINANT,

VS.

NATIONAL PHONOGRAPH COMPANY,  
AND  
BLACKMAN TALKING MACHINE COMPANY,  
DEFENDANTS,

IN EQUITY

DEFENDANTS' EXHIBIT—SKETCH OF:  
SILVER LAKE DUPLICATING MACHINE.





UNITED STATES CIRCUIT COURT.  
SOUTHERN DISTRICT OF NEW YORK.

AMERICAN GRAPHOPHONE COMPANY, )  
Complainant, :  
vs. ) In Equity.  
NATIONAL PHONOGRAPH COMPANY :  
and  
BLACKMAN TALKING MACHINE )  
COMPANY, Defendants. :

AFFIDAVIT OF MRS. JULIA DEVONALD.

State of New Jersey, )  
County of Essex. ) ss.

MRS. JULIA DEVONALD, of legal age and a resident of Orange, in the County of Essex and State of New Jersey, being first duly sworn on oath, deposes and says as follows:

My maiden name was Julia Miller. About seventeen years ago, and as nearly as I can recollect about the year 1892, I was engaged in assisting Mr. Walter H. Miller in the manufacture of duplicate phonograph records on duplicating machines at Silver Lake, New Jersey. We had four such machines at that place at first, and afterwards two more were made so that we ultimately had six in all. I attended to the operation of these machines, putting the blanks and master records in place and setting the machine into operation, and when the duplicate record was completed I removed the same and replaced it with a new blank.



We made large numbers of cut or engraved duplicates on these machines. While my mechanical turn of mind is not particularly strong, I recollect clearly the principal features of these machines, and remember that the master record and the blank cylinder were placed on shafts or mandrels parallel to one another and that there was a floating weight which hung down between the two cylinders which carried the reproducer lever and stylus. While I do not recollect the precise character of the mounting of the reproducer stylus lever, I do remember it was mounted in such a way that it could follow any lateral deviation which there might be in the master record. I remember also that the cutting stylus was connected to a diaphragm which was operated from the reproducer and that I could listen to the sound produced by the vibration of this diaphragm and determine thereby whether the machine was in need of adjustment. I recollect also that there was a lever at the top of the machine which I threw back in order to move the stylus away from the master record when the same was to be replaced.

I have examined the sketch introduced in evidence by Mr. Walter H. Miller and marked - "Defendants' Exhibit-Sketch of Silver Lake Duplicating Machine." This sketch embodies the features which I recollect as having been present in the machines which I operated at Silver Lake, and while I am not certain about all the details of the machine after the lapse of so long a period of time, I believe that the same illustrates the machines which we had in use at that time. Certainly, so far as I recol-



lect the machine, this sketch embodies all the features  
which I remember as having been contained in the machines  
in use at Silver Lake.

*Mrs. Julia Donald*

Sworn to and subscribed before  
me this ~~22~~<sup>22<sup>nd</sup></sup> day of July, 1909.

*A. X. Dyke*

NOTARY PUBLIC, STATE OF NEW JERSEY.  
MY COMMISSION EXPIRES MAY 1912

*(Seal)*



IN THE UNITED STATES CIRCUIT COURT  
SOUTHERN DISTRICT OF NEW YORK

AMERICAN GRAPHOPHONE COMPANY  
Complainant

-VS-

NATIONAL PHONOGRAPH COMPANY  
and BLACKMAN TALKING MACHINE  
COMPANY

Defendants

In Equity 4/151  
on  
Letters Patent  
No. 881,831.

Testimony taken on behalf of defendants before Anna R. Klehm, Notary Public of New Jersey, special examiner by consent of parties, at the Edison Office Building, Lakeside Avenue, West Orange, N. J., this 19th day of July, 1910 under the provisions of the Revised Statutes and the 67th Rule In Equity as amended, formal notice of the taking of testimony having been waived.

Present: C. A. L. Massie, Esq., of counsel for  
Complainant

H. H. Dyke, Esq., of counsel for Defendants.

WALTER H. MILLER, a witness produced on behalf of defendants, being first duly sworn, testifies as follows in answer to questions propounded by Mr. Dyke:

Q-1 Please state your name, age, residence and occupation.

A     Walter H. Miller, age 40 years, Orange, N. J.,  
Manager of Recording Department.

Q-2 Please explain what <sup>the</sup> work of the Recording Department upon which you are engaged consists of.

A We engage the talent and from them make the original or master records from which molds are made for molding the commercial records which are sold to-day by the National Phonograph Company.

Q-3 The original records which you make are made, are they not, by engraving by means of a recording phonograph in a blank wax cylinder?

A    They are.

Q-4 How long have you been familiar with the phonograph industry?

A My first experience with phonographs was between the years 1888 and 1889.

Q-5 Since that time have you been continuously familiar with this art?



A I have been connected with recording and duplicating sound records since that date.

Q-6 Please state whether you consider yourself thoroughly familiar with the phonographic art.

A I think that I am quite familiar with the recording and duplicating of sound records.

Q-7 Prior to the present commercial records, which I understand are made by a molding process, how were the commercial records which were placed upon the market manufactured?

A They were made by what we called mechanical duplication.

Q-8 Did you have any experience along that line?

A I did

Q-9 Where were you first engaged along this line of operation?

A The first duplicates were manufactured at the Edison Laboratory at West Orange, N. J. and transferred to Silver Lake where we had six or eight machines.

Q-10 Did you manufacture duplicate records at Silver Lake?

A I did.

Q-11 About when, if you remember?

A Somewheres around 1890.

Q-12 Who had charge of that work?

A I had charge of it.

Q-13 Were you familiar with the machines used?

A Yes, sir.

Q-14 Could you produce a sketch showing in a general way the sort of machine used at Silver Lake for duplicating phonograph records?

By Mr. Massie:

Objected to as irrelevant, immaterial and as incompetent.

A I can.

Q-15 Could you produce any of the machines which were used at that time, Mr. Miller?

A I cannot. As far as I know, these machines are destroyed as scrap.

Q-16 About how long has it been since duplicate records made by mechanical duplication were manufactured at Silver Lake?

A As far as I can recollect, we were duplicating around 1890 and continued to manufacture them at Silver Lake for over a year.



Q-17 But they have not been manufactured at Silver Lake for a great many years?

A No. I think, as far as I can recall, duplicating was discontinued and was taken up by the North American Phonograph Company.

Q-18 All the duplicating machines which you originally used at Silver Lake have not been used for many years. Is that not true?

A Yes, sir.

Q-19 Mr. Miller, you made an affidavit in the motion for preliminary injunction in this cause about a year ago. Did you make any search for these machines at that time?

A Yes, I did.

Q-20 Were you able to find them?

A I could not. These machines were constructed on a cast iron ~~piece~~ base with an angle piece on each side and on each angle piece the phonograph bodies were screwed and held firmly.

Q-21 Will you now please produce the sketch you say you can produce, showing the machine referred to in a general way from recollection.

A Yes. Here it is.

By Mr. Massie:

Objected to as irrelevant, immaterial and incompetent.

By Mr. Dyke:

The sketch produced by the witness is introduced in evidence with the following designation: "Defendants' Exhibit - Sketch of Silver Lake Duplicating Machine".

By Mr. Massie:

Exhibit objected to as irrelevant, immaterial and incompetent.

Q-22 Please explain the machine as illustrated by this sketch and its operation.

A A is the master record. B is the blank to which the duplication is transferred. E is a reproducer ball fastened into the reproducing lever D. H is a recording stylus fastened onto a diaphragm G and the reproducing lever D is connected to the diaphragm G and recording lever H by means of a wire link F. C is a lead weight pivoted in such a manner that it creates a pressure against the reproducer ball E to allow it to follow the record. In order to cut the proper depth on the recording blank, the screw N is used to adjust the depth of cut in order to take care of any irregularities, such as



what we call a "drunken thread" in the master, or in case the master ran out of round, we used a post J set into a brass holder I, which moved very freely in it and allowed the reproducing lever to turn one way or the other just as the master record desired it to cut in order to follow the sound groove.

Q-23 To make your statement slightly clearer, Mr. Miller, please state what it is that turns in the brass holder or bushing which you have described.

A The post J, which holds the reproducing lever D.

Q-24 What sort of an action would you describe that of the stylus lever to be?

A This post J moves very freely in the bushing I in such a manner that it will follow the sound groove.

Q-25 And the post which has the letters J and K applied to it is free to turn or rotate within the holder or bushing I. Is that your meaning?

A Yes, sir.

Q-26 Please state, if you remember, how many machines having the characteristics which you have described were in use at Silver Lake when you were in charge there.

A We had six machines. I am not positive but that we had one or two extra ones to replace any which might be out of repair.

Q-27 What was done with the records which were made from blanks by means of these machines after they were completed?

A They were shipped from Silver Lake to the Edison Phonograph Works and from there to the North American Phonograph Company.

Q-28 What then was done with them?

By Mr. Massie

Objected to as immaterial.

A Sold to the sub-companies of the North American Phonograph Company.

Q-29 From there what was their destination?

By Mr. Massie:

Objected to as incompetent.

A They were sold by the sub-companies to the public.

Q-30 Is this matter of the various transfers of these records and their final sale to the public one of your own personal knowledge?

A Yes, sir.

Q-31 Have you any idea as to the number of mechanical duplicatephonograph cylinder records made and sold in that way?

A I have not. It may have been about 500 to 1500 a week.



Q-32 For a period of a year or more?

A Yes.

Q-33 Please state, if you remember, the names of any persons who operated these machines under your direction.

A Julia Miller was my head operator. She had two or three other girls helping her.

Q-34 What is her name now, if you recollect?

A Mrs. Devonald.

Q-35 Did you know of any other forms of apparatus that were used by the Edison Phonograph Works or any of its affiliated companies for making records by mechanical duplicating processes?

By Mr. Massie:

Objected to as irrelevant.

A I did.

Q-36 Please state what, if anything, you know about the use of the lever which I now show you.

By Mr. Massie:

Question is objected to as irrelevant and immaterial and on its face not pertaining to the issues here involved.

A This lever was used in one style of duplicating machine employed by the Phonograph Works for quite some time.

Q-37 Before or after the machine which you have just described?

A This lever is a later <sup>pattern</sup> ~~patent~~ than the machine first described by me.

By Mr. Dyke:

The lever referred to by the witness is introduced in evidence with the designation: "Defendants' Exhibit - Duplicating Machine Lever No. 1".

By Mr. Massie:

Exhibit objected to as irrelevant and immaterial and as not sufficiently proved.

Q-38 Is this lever in its present form complete, or are there any parts lacking, and if so, name and describe them.

By Mr. Massie:

Objected to as manifestly incompetent and as likewise irrelevant and immaterial.

A This lever is minus the recording needle and the reproducing ball, but is complete otherwise as far as the lever is concerned.

Q-39 Were any other or further types of duplicating levers employed about the Edison Phonograph Works to your knowledge?



By Mr. Massie:

Same objection as to relevancy.

A There were.

Q-40 Can you produce a later type of lever for mechanical duplicating machines?

A I can. Here is one of them.

By Mr. Dyke:

The device produced by the witness is introduced in evidence with the designation: "Defendants' Exhibit - Duplicating Machine Lever No. 2."

By Mr. Massie:

Exhibit objected to as irrelevant and immaterial and as not sufficiently proved.

Q-41 Who took up, if you remember, the charge of the mechanical duplicating work at the Edison Phonograph Works after you?

A Mr. Adolph F. Gall.

Q-42 And where was this work continued under Mr. Gall?

A In the Edison Phonograph Works at Orange, N. J.

Direct examination closed.

Cross examination by Mr. Massie:

XQ-43 I understood you to say in the first part of your examination that ever since 1888 or 1889, when you first commenced in this business, you had been familiar with the mechanical duplicating of phonograph records. Is that correct?

A Yes, sir.

XQ-44 Is it your testimony that as early as 1888 or 1889 the mechanically cut duplicates were being made?

A Yes, sir. By that I mean that in 1889 we had these duplicating machines which I referred to in the experimental stage at the laboratory.

XQ-45 That was about 1889, you say?

A Yes, sir.

XQ-46 Within the first year after you entered the business.

A 1889 was two years after I entered the business.



XQ-47 Is it your testimony that the sketch produced as "Defendants' Exhibit - Sketch of Silver Lake Duplicating Machine" is in all respects a correct representation of the apparatus as you remember it?

A With one or two slight changes which were not put down on the original sketch.

XQ-48 What is put down in the sketch is correctly shown to the best of your recollection?

A It is.

XQ-49 How did you understand from the sketch that the device marked H which you referred to as the recording stylus is mounted?

A G is a diaphragm usually made of glass or mica clamped between rubber gaskets. On this glass or mica diaphragm was fastened a recording arm with a stylus at its end as shown in the drawing at H, the other end of which was fastened at the edge of the diaphragm.

XQ-50 How was this arm or stylus H fastened to the diaphragm?

A The foot of the arm is fastened to the glass or mica by means of shellac in some cases. In other cases we had a brass cross head which, in case of the mica dia-

phragm came through the mica and a clamping nut which held this cross head firmly to the diaphragm.

XQ-51 The reference letter H on the defendants' exhibit before us has extending therefrom the two parallel lines extending to the cross sectional showing of the L-shaped piece above the diaphragm, and to the right of the part marked H are the two curved lines that extend to the center of the line marked G. What is the first named part, that indicated by the two parallel lines, and what is the other part, indicated by the two curved lines?

A The two parallel lines was a piece of steel in the end of which was brazed a small brass bushing in which the needle was inserted. The two curved lines shown in the drawing was a brass piece fastened to the steel rod with a flat foot which was fastened to the diaphragm cross head.

XQ-52 Was that the usual construction of recorders at the time of the Silver Lake duplicating you refer to?

By Mr. Dyke:

Question is objected to as incompetent and as an attempt on the part of counsel for complainant to obtain evidence clearly not relating to the matter of this suit, but evidently for use in another suit.



By Mr. Massie:

The objection to incompetency is not appreciated.

A It was.

XQ-53 Please explain what you mean in your answers by the expressions "drunken thread" and "out of round".

A When a master is placed on a taper mandrel some times it will not run perfectly true. In such case I would say that the master revolves out of round, and in cases due to shrinkage of wax and sometimes due to out of round, the record grooves do not run perfectly parallel with the master feed screw.

XQ-54 That is, "out of round" means a departure of the record from the true cylindrical surface as it revolves on the mandrel; a "drunken thread" means a deviation of the thread either to the right or to the left from its true spiral or helical course.

A Yes, sir.

XQ-55 Did you intend to state in your direct testimony that the construction and arrangement of the parts, I, J, and K permitted the reproducing stylus E to compensate for any "out of round" condition of said master record A?

A I did, as I found in duplicating that when a record moves out of round there are times when the threads are

not perfectly parallel to the feed screw. The out of round is also taken care of by the pivoted weight C. XQ56 The pivot of the weight C is indicated by the circle appearing within the dotted lines below where the lead-line from reference letter C terminates, is it not?

A I said in my testimony that there were certain details which we used in practice that were not in this drawing. One of these exceptions was the bearing for the weight C, and instead of using a pin bearing such as is shown, we used two pointed centers at each side of the weight.

XQ-57 What you used in these Silver Lake duplicating machines was a yoke fastened at the top of the weight C and having an arm depending on each side of the weight and terminating in a point, which rested in a seat or socket, one on each side of the weight, so that the weight could oscillate or seesaw thereon. Is that correct?

A I do not understand your description as above.

XQ-58 Will you please explain a little more ~~fully~~ <sup>now</sup> clearly then exactly how the weight C was mounted?

A On the arm to which the diaphragm G is clamped there was a projection from the same at right angles with the arm itself extending the full length of the weight in which was a V-slot. At both ends of the weight C were



screwed a long pointed center which was screwed through the middle of the weight C and rested on this V-slotted groove on the lug which projected from the diaphragm arm.

XQ-59 Do you mean that the horizontally extending arm that is just above diaphragm G passes through an opening in the weight C?

A I do.

XQ-60 And there was only a single bearing point resting in the groove in this arm?

A Two of them; one in each end of the weight.

XQ-61 Then there were two such arms extending through the weight C?

A There were.

XQ-62 In the construction which you have been describing, the weight C hung vertically with its center of gravity, of course, in a vertical line beneath the centers you have mentioned, did it not?

A Yes, sir.

XQ-63 What is your best present recollection as to the number of such duplicating machines at Silver Lake?

A We had six machines set on tables and in operation at Silver. I am not certain but what we had one or two

extra ones to replace any one of these six which were out of order.

XQ-64 During the period of the duplicating operations at Silver Lake, were you in constant attendance there?

A Yes.

XQ-65 Did you have anything to do with the selling end of the business.

A No, sir.

Cross examination closed.

By Mr. Dyke:

RDQ-66 As I understand your testimony on cross examination, Mr. Miller, with respect to the pivoting of the floating weight C, the fact is simply that while the lever rocked on the point indicated by Mr. Massie as shown in dotted lines immediately below the lead line to letter C, the weight rocked upon knife edges and not upon a pin passing through the weight. Is that correct?

A It rocked on pointed centers.

RDQ-67 And was it mounted to pivot on the point I have named?

A It was.

By Mr. Massie:

RXQ-68 Of what material was the reproducing stylus



stylus marked E in the sketch and the recording stylus marked H in the sketch?

A Both made of sapphire.

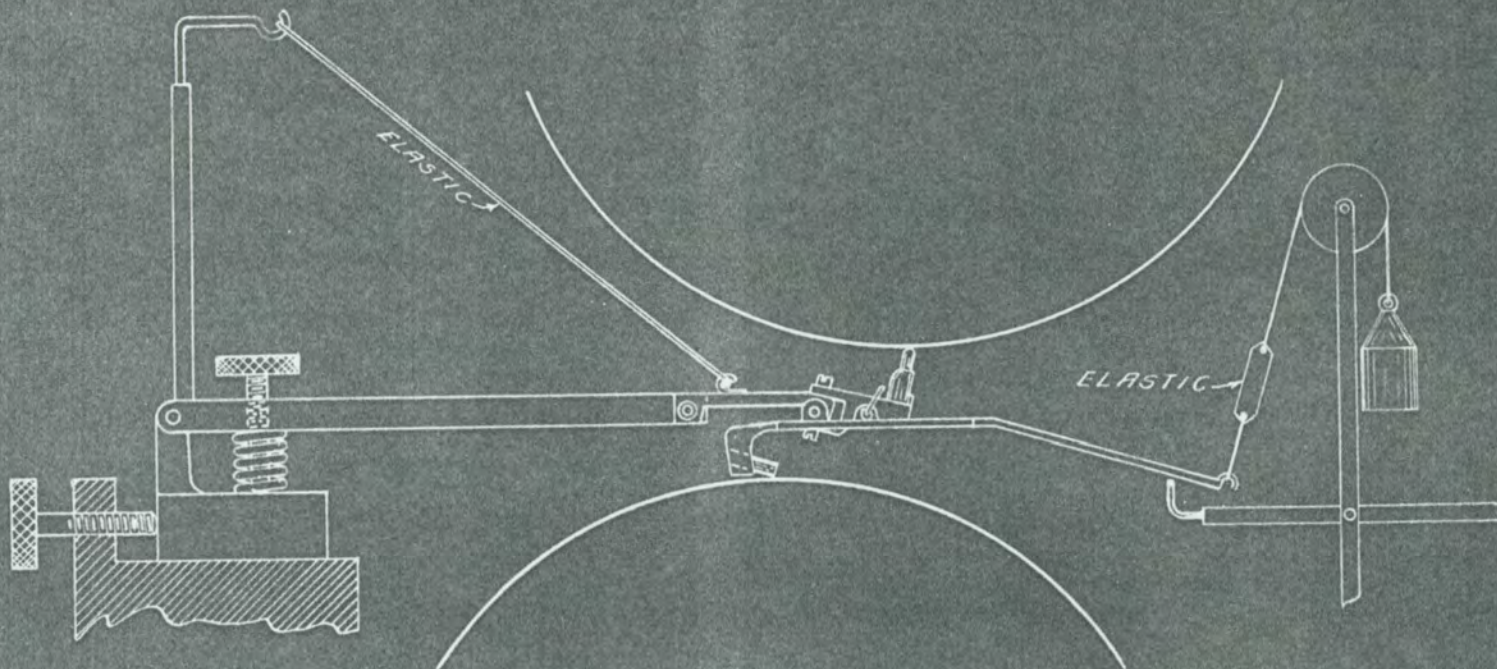
RXQ-69 And they were made of that material at all times during the operations at Silver Lake?

A Yes, sir.

Deposition closed.

Signature and certificate waived.





UNITED STATES CIRCUIT COURT.  
SOUTHERN DISTRICT OF NEW YORK.

AMERICAN GRAPHOPHONE COMPANY,  
COMPLAINANT,

VS.

NATIONAL PHONOGRAPH COMPANY,  
AND

BLACKMAN TALKING MACHINE COMPANY,  
DEFENDANTS.

IN EQUITY

1 DEFENDANTS' EXHIBIT — SKETCH OF ORANGE DUPLICATING MACHINES NO 2.



UNITED STATES CIRCUIT COURT  
SOUTHERN DISTRICT OF NEW YORK

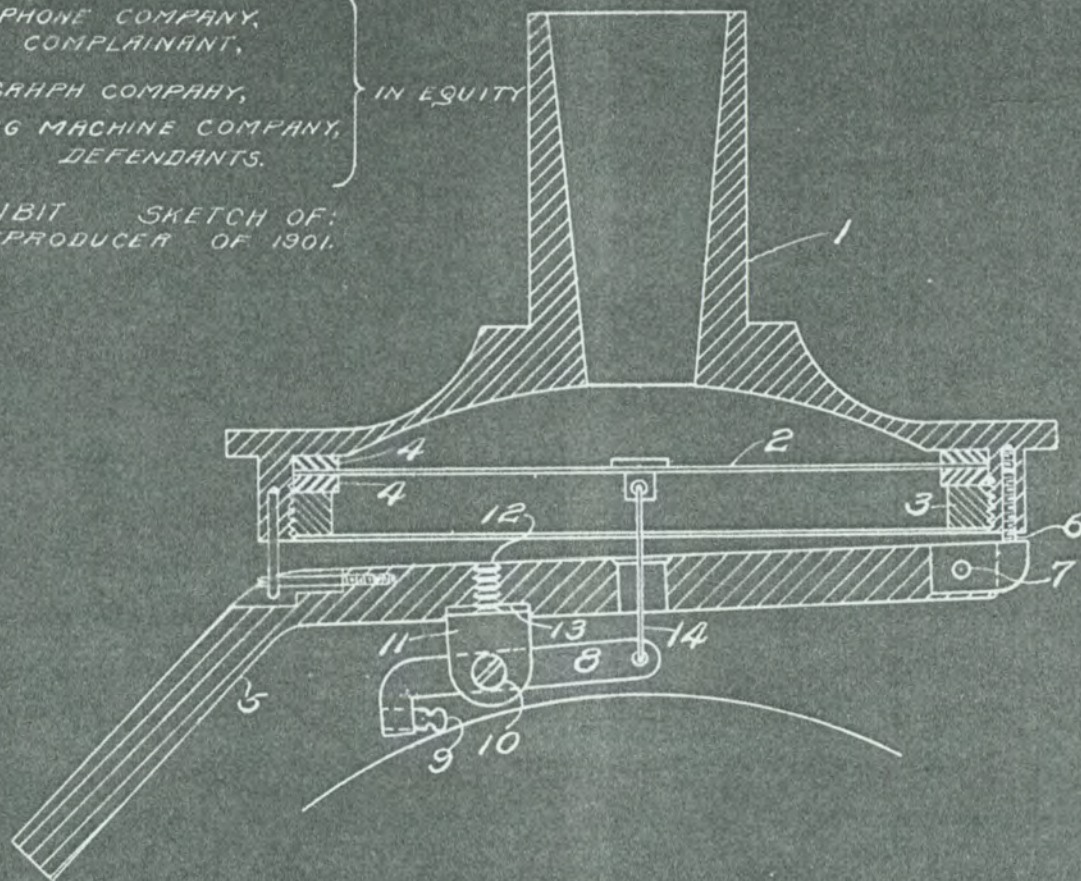
AMERICAN GRAPHOPHONE COMPANY,  
COMPLAINANT,

VS.

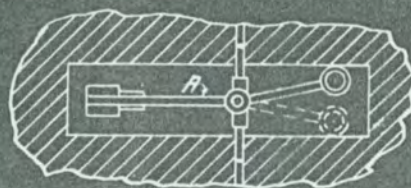
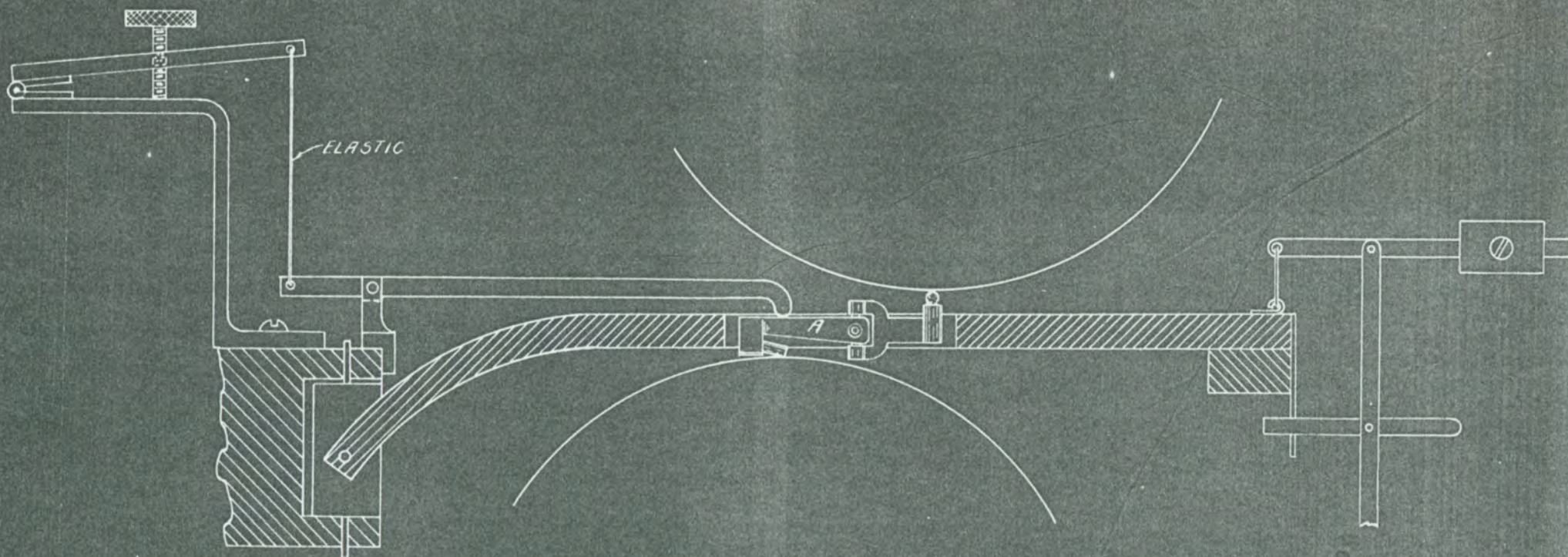
NATIONAL PHONOGRAPH COMPANY,  
AND  
BLACKMAN TALKING MACHINE COMPANY,  
DEFENDANTS.

IN EQUITY

DEFENDANTS' EXHIBIT SKETCH OF:  
GALL SWIVEL REPRODUCER OF 1901.







UNITED STATES CIRCUIT COURT.  
SOUTHERN DISTRICT OF NEW YORK.

AMERICAN GRAPHOPHONE COMPANY,  
COMPLAINANT,

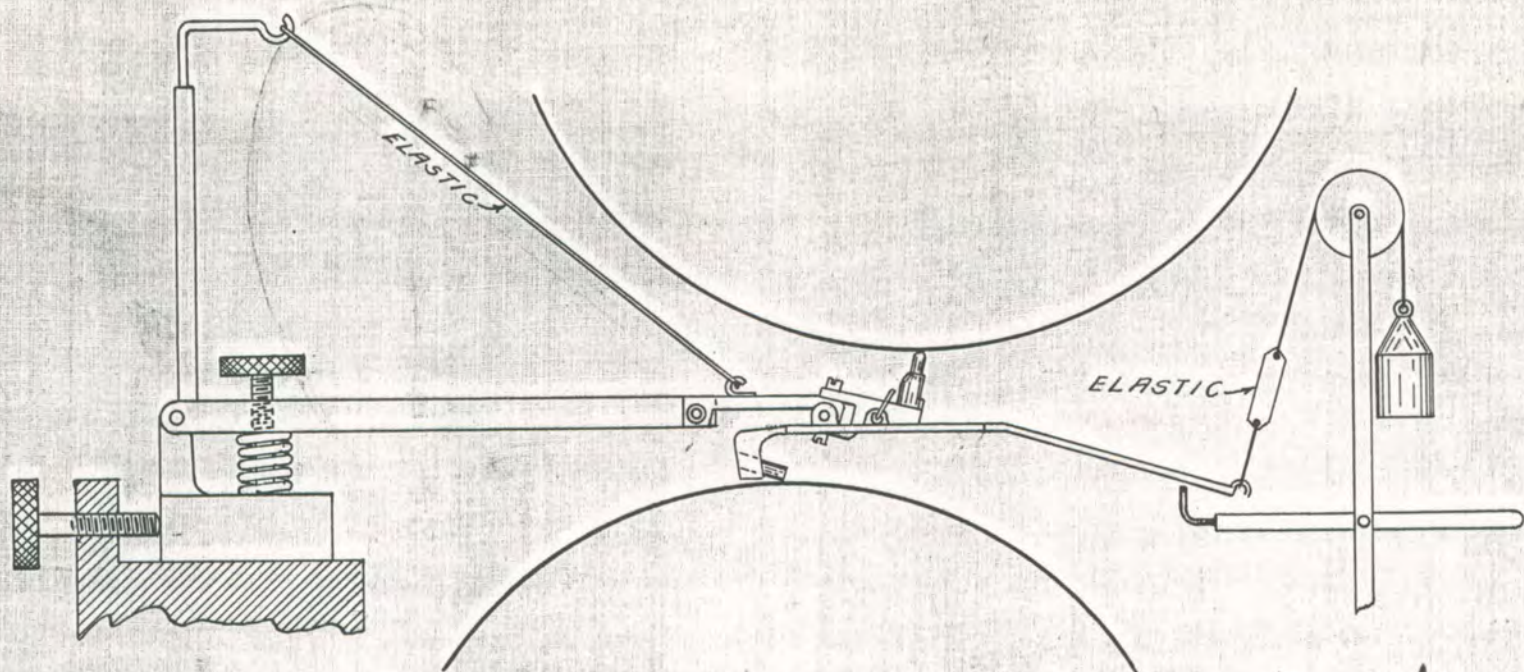
VS

NATIONAL PHONOGRAPH COMPANY,  
AND  
BLACKMAN TALKING MACHINE COMPANY,  
DEFENDANTS.

IN EQUITY

DEFENDANTS' EXHIBIT — SKETCH OF ORANGE DUPLICATING MACHINE No. 1.

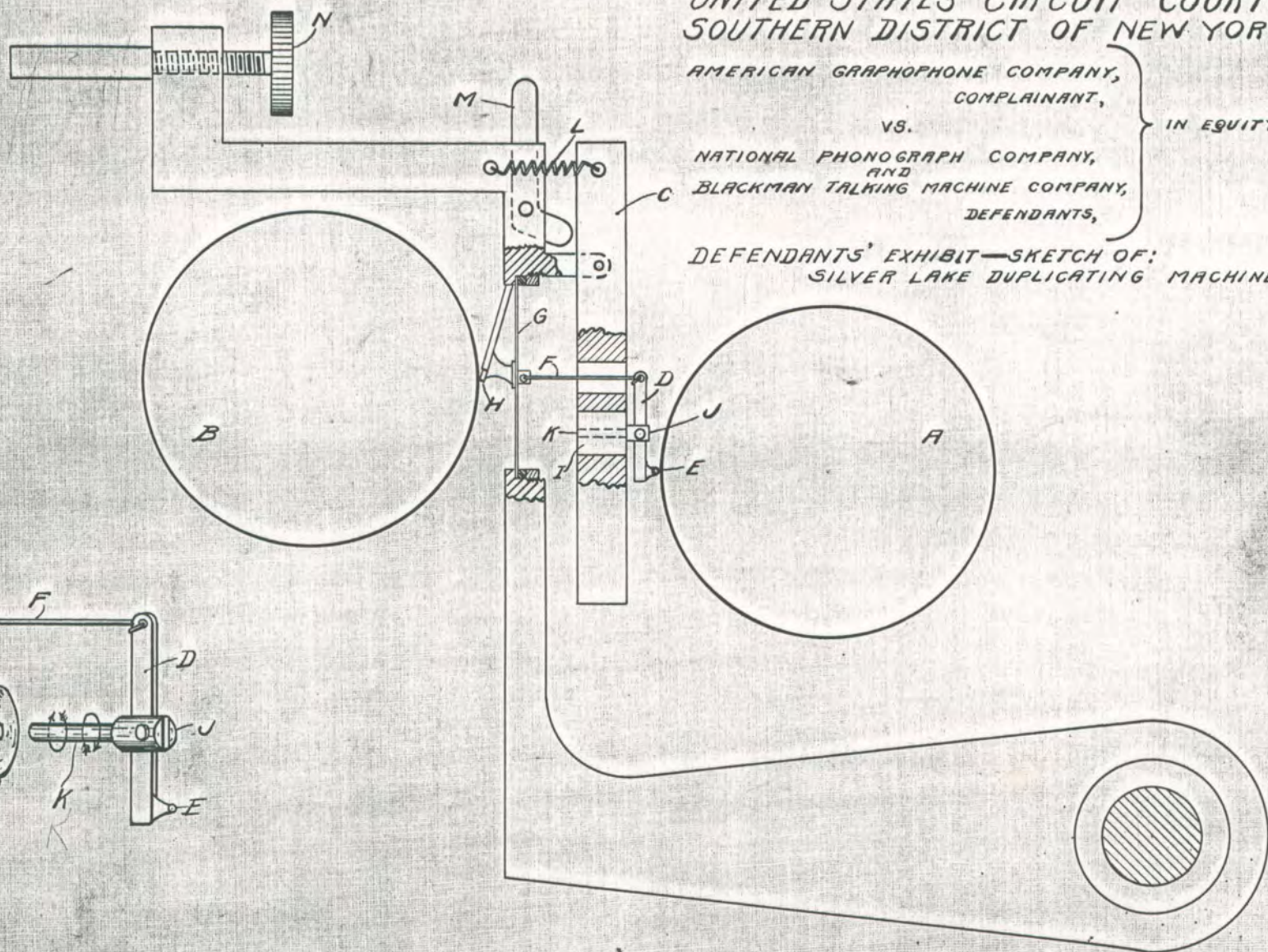




UNITED STATES CIRCUIT COURT.  
SOUTHERN DISTRICT OF NEW YORK.

AMERICAN GRAPHOPHONE COMPANY,  
COMPLAINANT,  
VS.  
NATIONAL PHONOGRAPH COMPANY,  
AND  
BLACKMAN TALKING MACHINE COMPANY,  
DEFENDANTS. } IN EQUITY

DEFENDANTS' EXHIBIT — SKETCH OF ORANGE DUPLICATING MACHINES NO. 2.

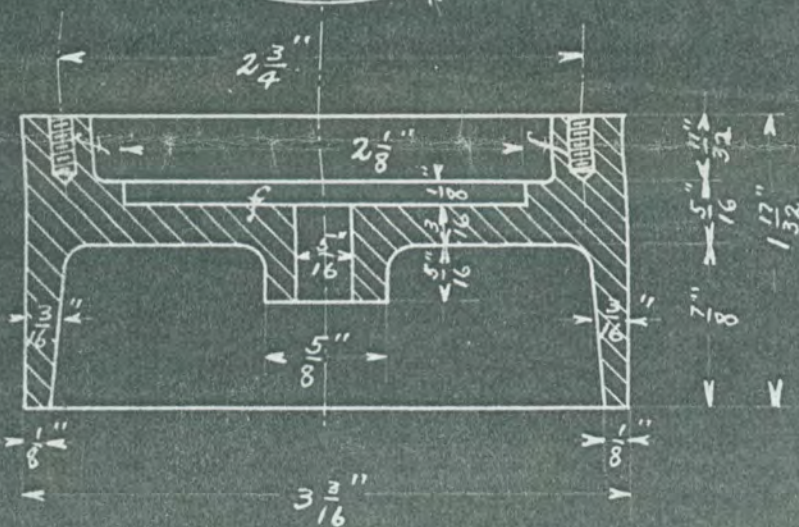
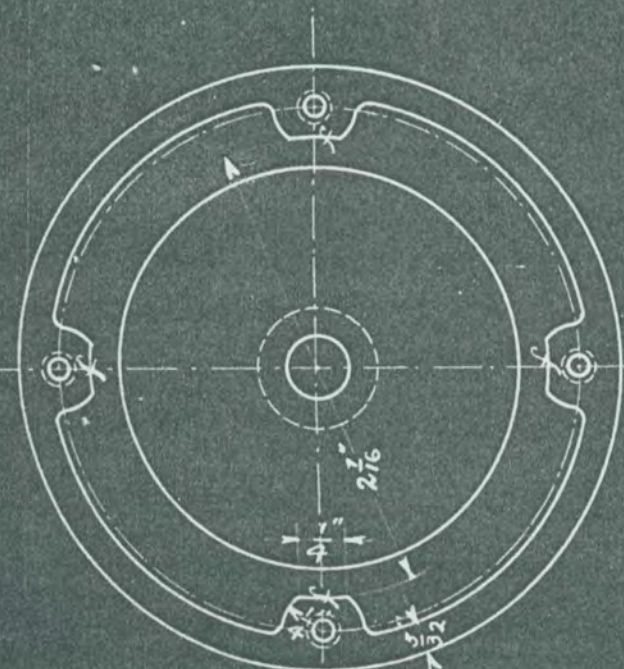
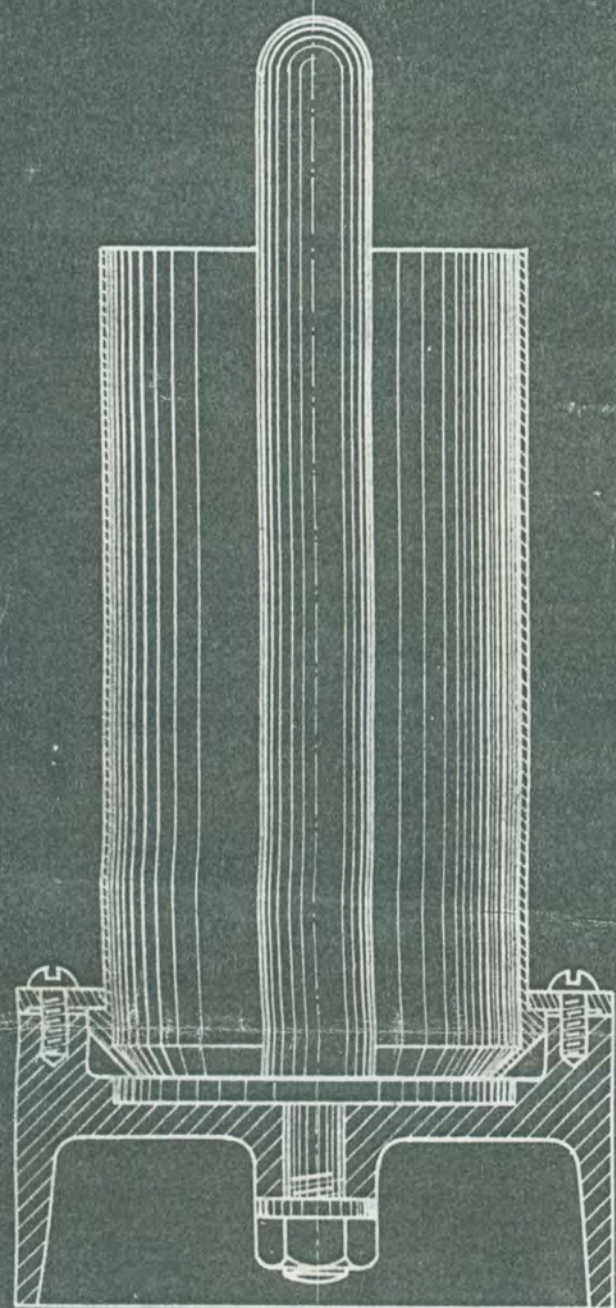


UNITED STATES CIRCUIT COURT.  
SOUTHERN DISTRICT OF NEW YORK.

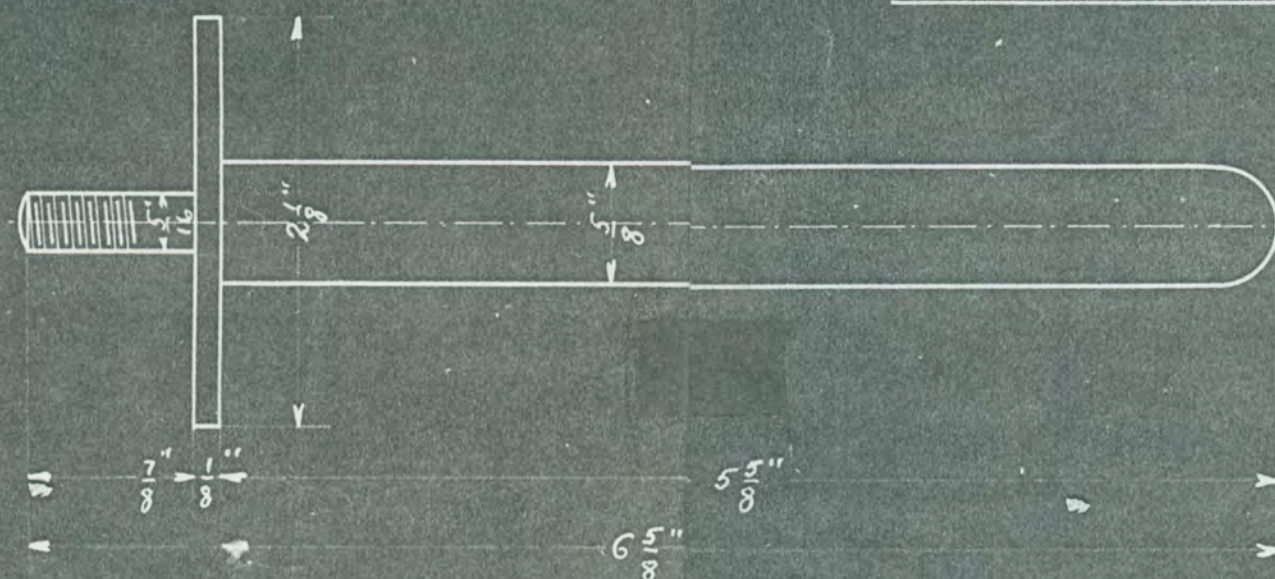
AMERICAN GRAPHOPHONE COMPANY,  
COMPLAINANT,  
VS.  
NATIONAL PHONOGRAPH COMPANY,  
AND  
BLACKMAN TALKING MACHINE COMPANY,  
DEFENDANTS. } IN EQUITY.

DEFENDANTS' EXHIBIT — SKETCH OF:  
SILVER LAKE DUPLICATING MACHINE.

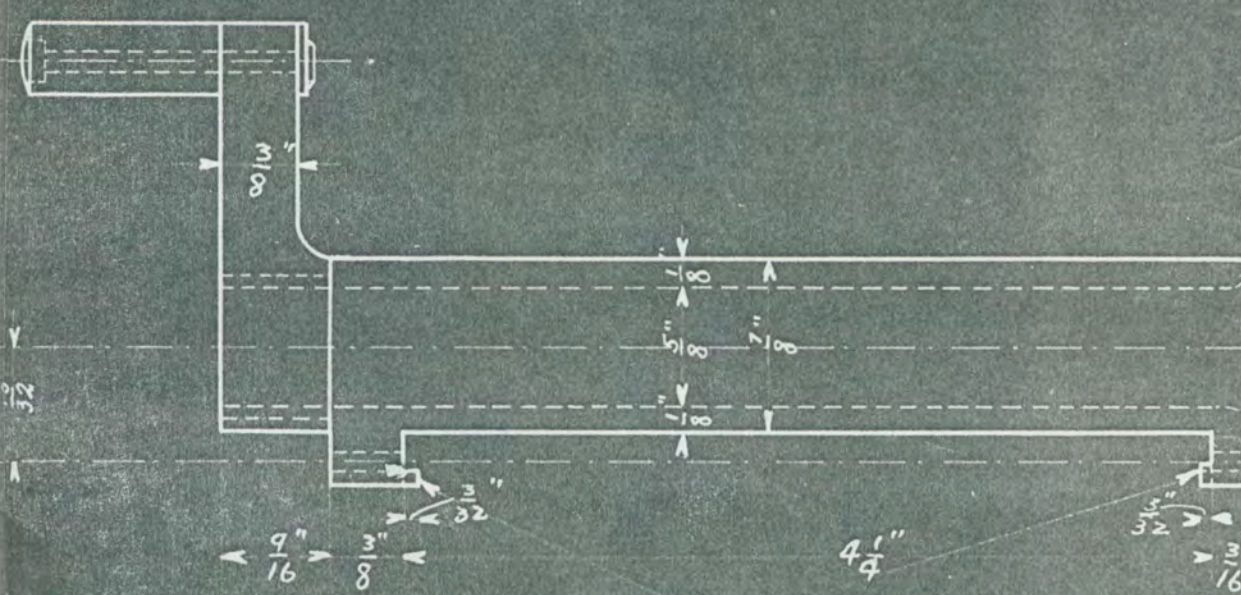




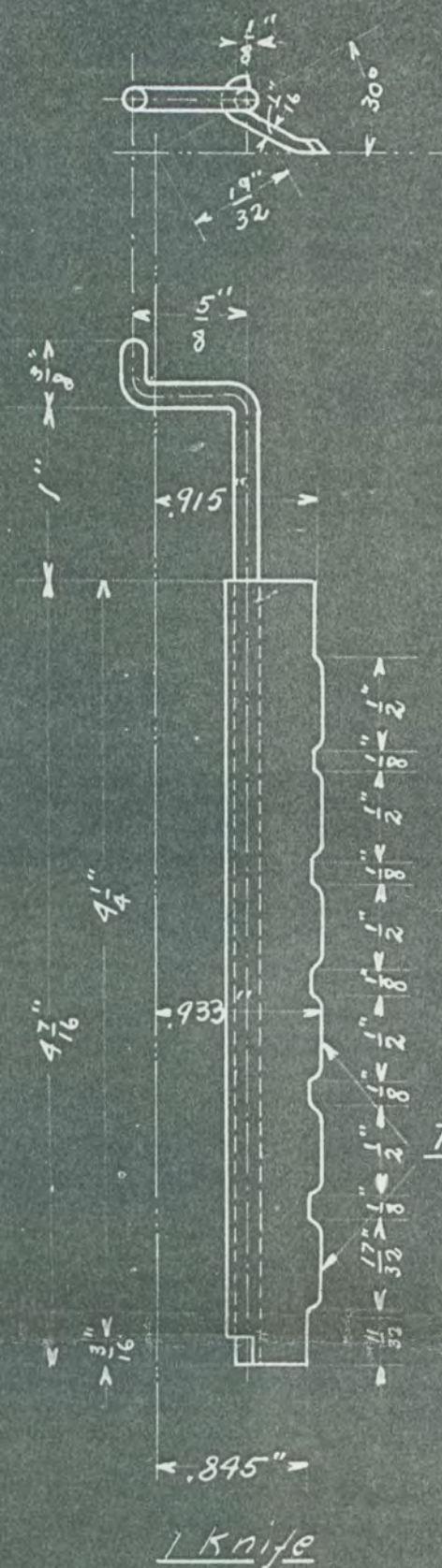
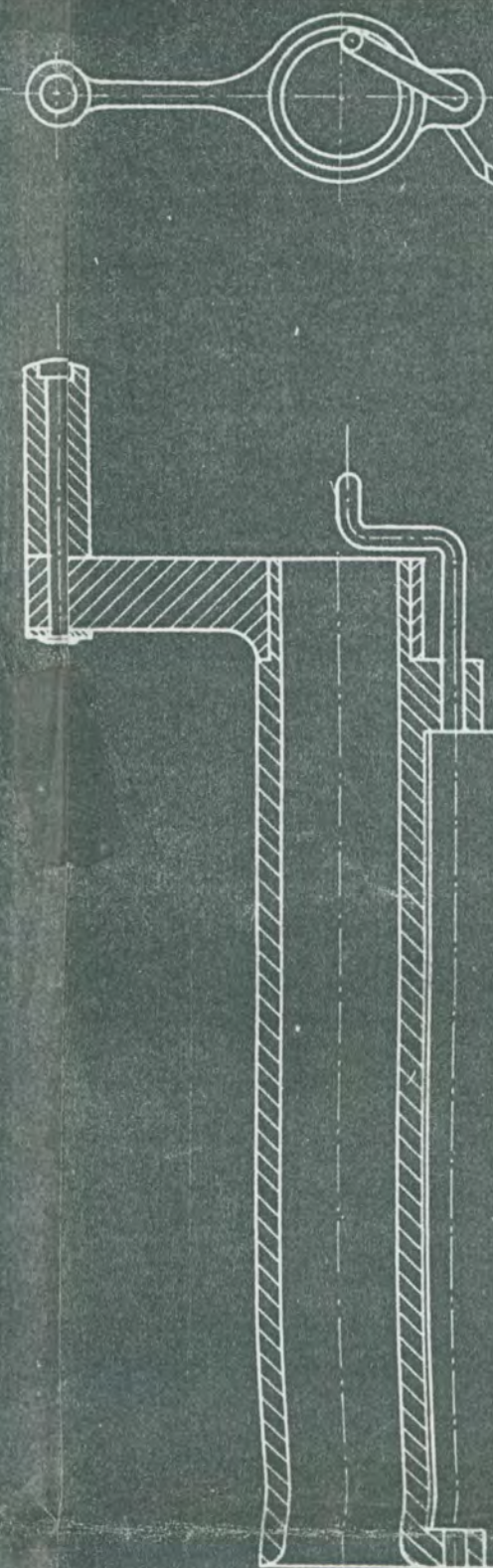
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Pattern No 2230



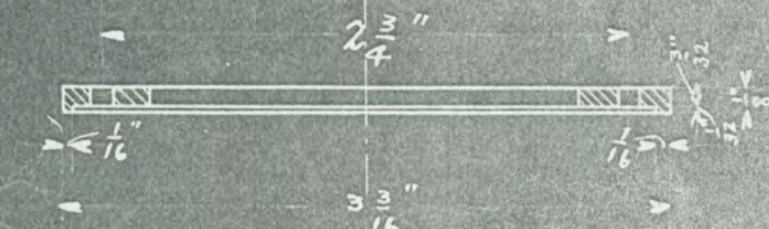
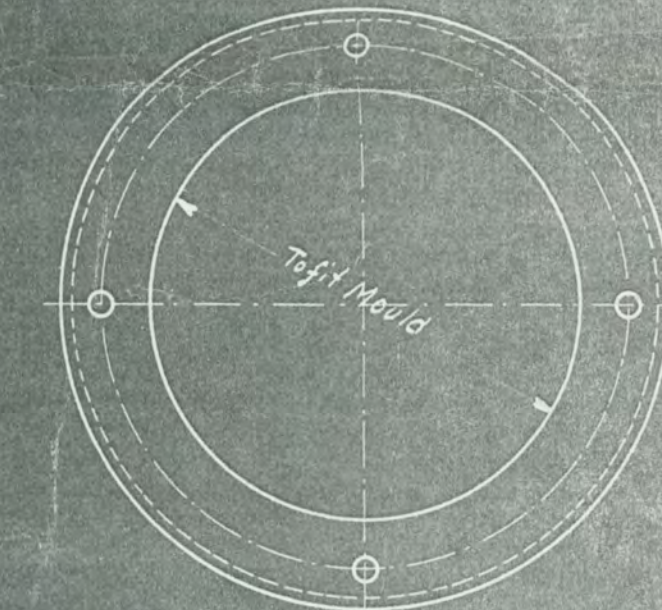
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Steel



1 of this  
Brass



Taper .0019" to 1"



1 Clamp Ring  
1/8" Brass

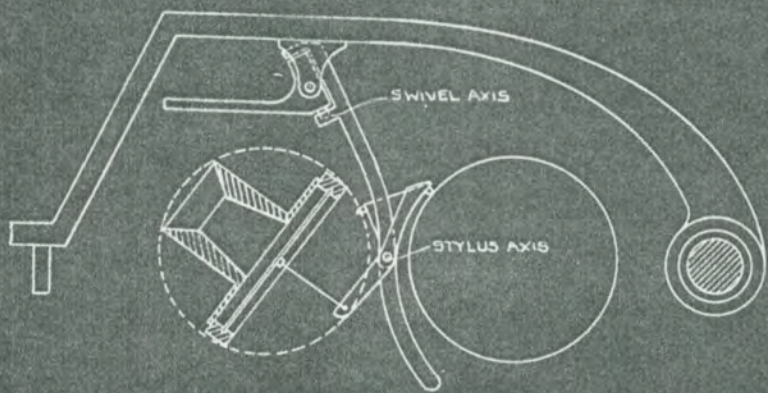
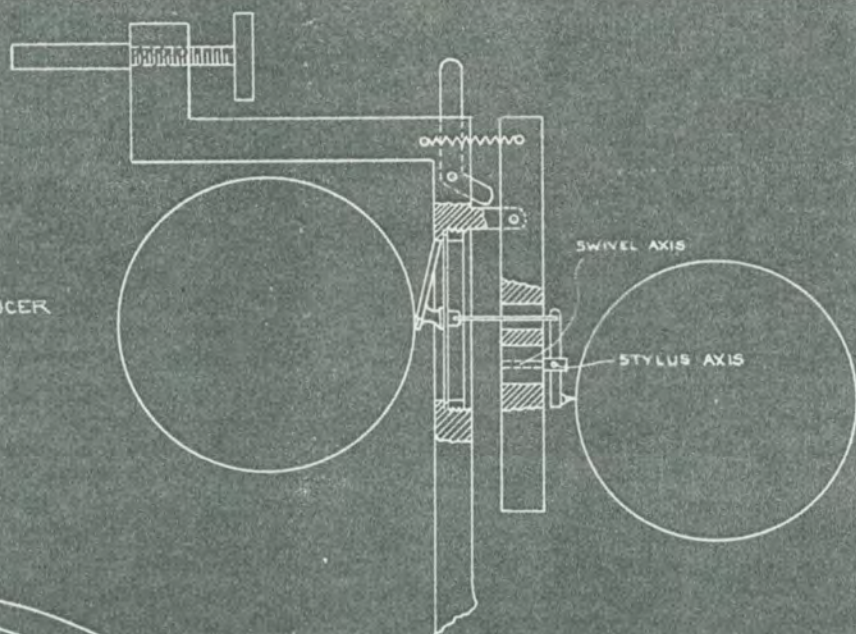
Mould & Knife

Scale: Full Size  
National Phonograph Co  
Orange, N.J. J.F.S. May 23-05



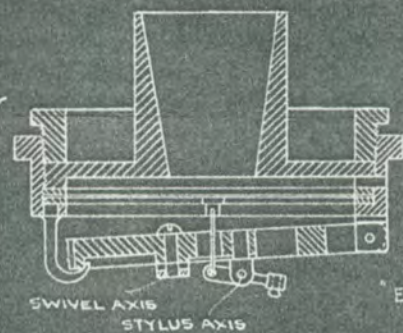
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SILVER LAKE  
COMBINED RECORD AND SOUND REPRODUCER



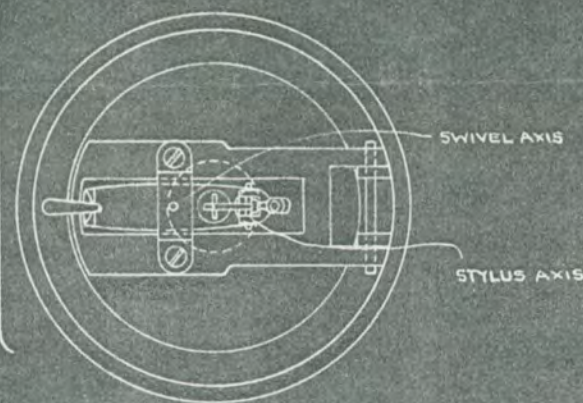
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MACDONALD 1896  
ALTERED FROM RECORD REPRODUCER TO  
SOUND REPRODUCER



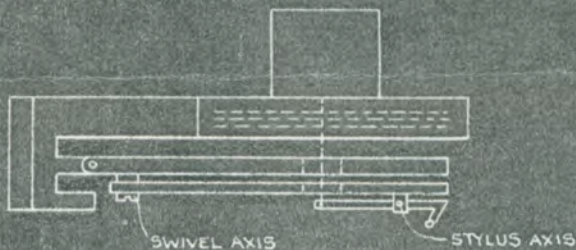
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EDISON-BELL BRITISH  
1896



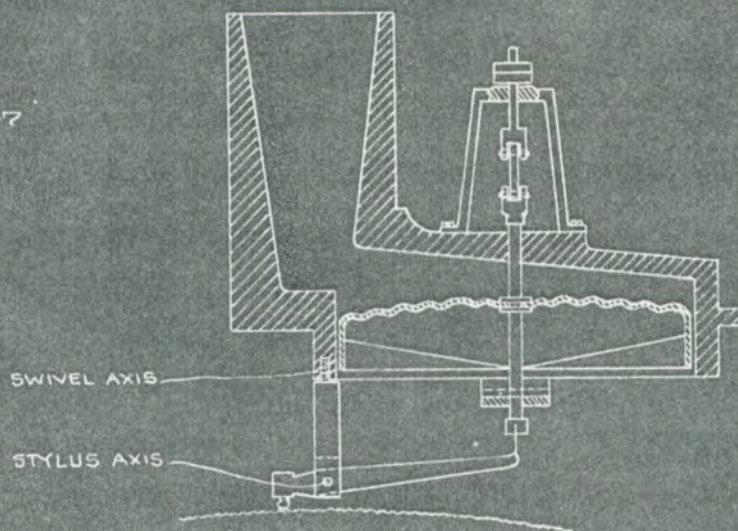
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BRITISH 1903



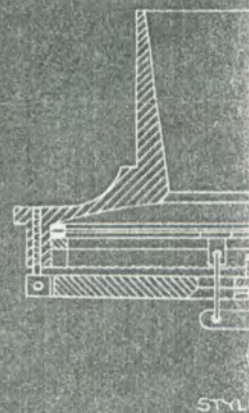
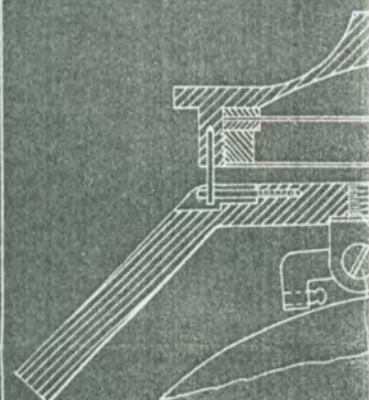
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EDISON MARCH 1907



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GALL 1901

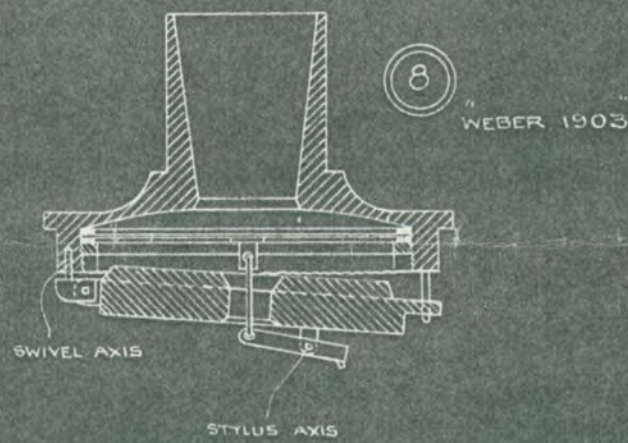
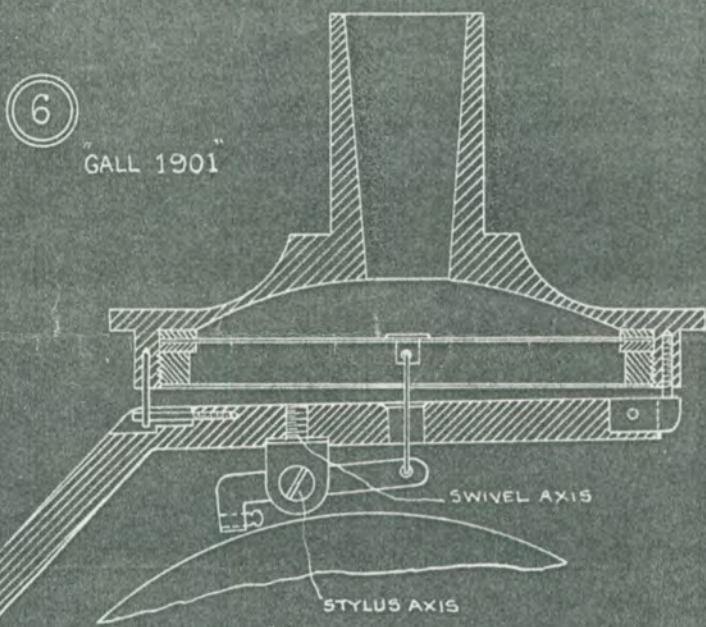
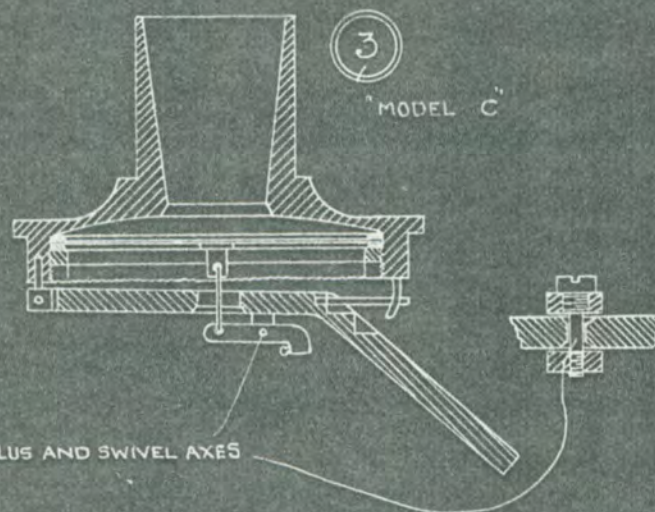
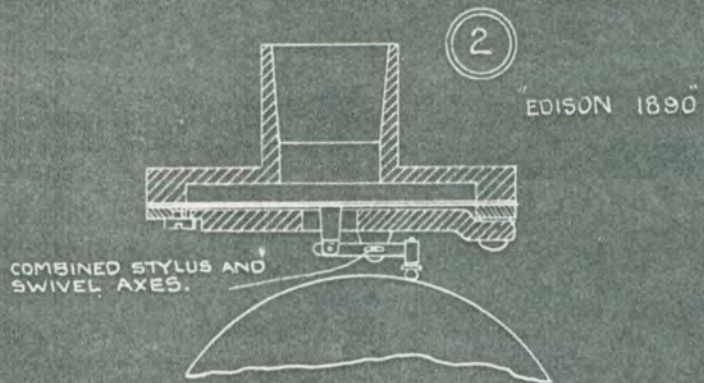


UNITED STATES CIRCUIT COURT  
SOUTHERN DISTRICT OF NEW YORK  
AMERICAN GRAPHOPHONE COMPANY  
COMPLAINANT  
VS  
NATIONAL PHONOGRAPH COMPANY  
BLACKMAN TALKING MACHINE COMPANY  
DEFENDANTS

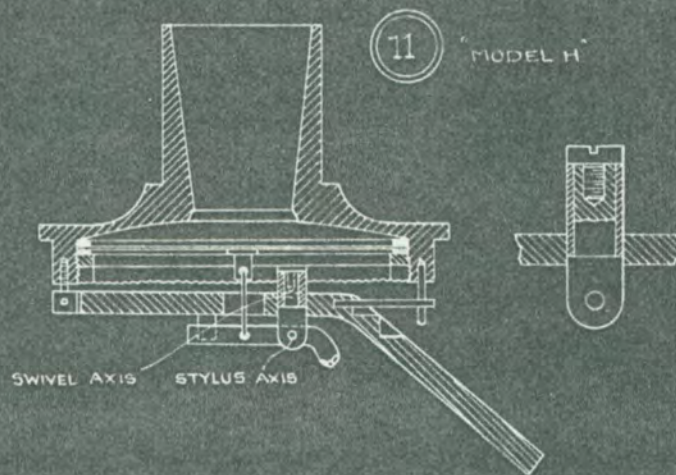
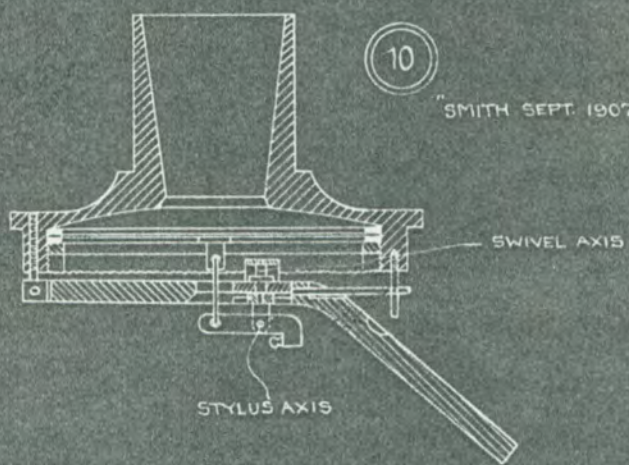
IN EQUITY  
No. 4/151

DEFENDANTS EXHIBIT - EXPERTS' DRAWING.





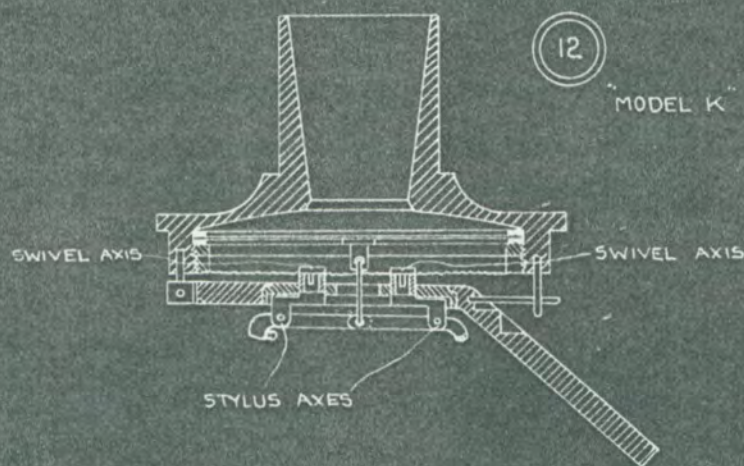
⑤ BELL BRITISH 1896



UNITED STATES CIRCUIT COURT  
SOUTHERN DISTRICT OF NEW YORK  
AMERICAN GRAPHOPHONE COMPANY  
COMPLAINANT  
VS  
NATIONAL PHONOGRAPH COMPANY  
BLACKMAN TALKING MACHINE COMPANY  
DEFENDANTS

IN EQUITY  
No 4/151

DANTS EXHIBIT - EXPERTS DRAWING.





UNITED STATES CIRCUIT COURT.  
SOUTHERN DISTRICT OF NEW YORK.

AMERICAN GRAPHOPHONE COMPANY, )  
Complainant, :  
vs. ) In Equity.  
NATIONAL PHONOGRAPH COMPANY :  
and  
BLACKMAN TALKING MACHINE )  
COMPANY, :  
Defendants. :

AFFIDAVIT OF ADOLPH F. GALL.

State of New Jersey, )  
County of Essex. ) ss.

ADOLPH F. GALL, of legal age and a resident of West Orange, in the County of Essex and State of New Jersey, being first duly sworn on oath deposes and says as follows: I am employed by the Edison Phonograph Works, and have charge of the manufacture of phonograph reproducers. I have been continuously in the employ of said Works since October of 1906. I was formerly in the employ of the Edison Phonograph Works and of the National Phonograph Company, having entered said employ in October, 1897, and having been so employed continuously from that time until October, 1901, at which time I entered the employ of the Weston Electrical Instrument Company, with which company I remained until I returned to Orange in 1906. I fix the month October, 1901, by reason of the fact that I made this change shortly after the time President McKinley was



shot in Buffalo. My occupation from 1897 to 1901 at Orange was first that of superintending the manufacture of duplicate records by means of duplicating machines, and later I had charge of the making of phonograph reproducers at which I am at present employed. The reproducer which was used by the National Phonograph Company in the year 1901 employed a floating weight in which the stylus lever was pivoted by a pin passing through the lever and through openings in lugs fixed to the bottom of the weight. The opening in the stylus lever was made somewhat larger than the diameter of the pin which passed through it so as to give a lateral play to the reproducer stylus lever and to compensate for any slight lateral malformation of the record groove. Having been engaged in duplicating work, I was familiar with the swiveled stylus levers which had been employed for many years on duplicating machines, and desiring to make the construction which provided for lateral play of the stylus somewhat more mechanical, I constructed a phonograph reproducer in which the stylus bar was mounted in a member swiveled in the floating weight. This was shortly before I left Orange in October of 1901, at which time I had my headquarters in a small room in the rear of the small wooden building on Lakeside Avenue formerly used as an office building. I left this reproducer with a number of other devices which I had constructed in this room when I went to the Weston Works in 1901, and I have never seen it since my return in 1906, although I have made diligent search for the same. Being unable to discover this old reproducer, I have made from memory a sketch thereof which is attached hereto and introduced in evidence



and which is marked - "Defendants' Exhibit-Sketch of Call Swivel Reproducer of 1901." In the said sketch, 1 represents the reproducer body which has a diaphragm 2 secured therein by an annular screw threaded ring 3, by means of which it is held between the two rubber gaskets, 4, 4. A floating weight 5 is pivoted to the reproducer body by means of a headed screw 6 which fits loosely within an internally threaded aperture and which is pivotally secured at 7 to the weight 5, thus providing a universal mounting for the weight. The stylus bar 8 carrying a reproducing stylus 9 was pivoted by means of a screw 10 passing through downwardly extending lugs on a rotatable member 11 which was seated in a recess 13 in the floating weight 5 and was provided with a screw threaded extension 12 which fitted loosely within a screw threaded opening in the floating weight in the same manner as the pin 6 was loosely fitted within the body of the reproducer, this construction serving both to hold the member 11 in place and to permit it to rotate or swivel within the floating weight when any sidewise pressure was applied to the stylus 9. A link 14 connected the end of the stylus lever opposite the stylus 9 to the diaphragm 2. After completing this reproducer and having it tested to see that it was mechanically correct and that the extreme play of the stylus as the floating weight moved up and down was of the correct amount to cause it to contact with the surface of records of varying thickness when the reproducer was placed within the arm of the phonograph, I placed it in a phonograph and made use of it for the reproduction of a number of records.



It operated to my entire satisfaction, and the lateral play permitted the stylus by this construction caused it to accommodate itself to all lateral deviations in the records. I showed this reproducer to Mr. Edward Morris who was employed in testing reproducers and phonographs at the time, and I reproduced records a number of times in his presence. I also showed it to and tested it in the presence of other persons whose names I have since forgotten, and it at all times worked in a thoroughly successful fashion and compensated for all lateral displacements of the record groove.

This reproducer was not, however, adopted at that time for general use on all our phonographs because the reproducers then in use compensated sufficiently for such lateral play as existed both by reason of the fact that the floating weight was swiveled upon a screw which fitted loosely within the reproducer body, and the additional fact that the stylus lever was fitted with a hole somewhat larger than the pin on which it was pivoted and the combined lateral play of the floating weight and of the loosely pivoted stylus lever was sufficient to permit all necessary accommodation for lateral malformation of the record groove which occurred in the records having 100 threads to the inch, which were the only records in use at that time.

In the year 1908, the National Phonograph Company was making arrangements to put out a new record which they called the "Amberol" record having 200 threads to the inch, and about the month of March in that year I was engaged in assisting to adapt the reproducer to the new record.



The record grooves in this record are, of course, only one-half as wide as in the standard record with one hundred threads to the inch, and desiring to get a reproducer somewhat more delicate than that which was in use, I decided to go back to the reproducer stylus mounting which I had used in the reproducer made in 1901. I thereupon, about the month of March, 1908, constructed a phonograph reproducer substantially identical with the reproducer which I have described as having been constructed by me in 1901, and which I now offer in evidence, and the same is marked - "Defendants' Exhibit - Gall Swivel Reproducer No. 2."

The only differences between this reproducer and the reproducer shown in the sketch above referred to consists in the insertion of the pin at one side of the swivel plate or screw head to limit the swivel action or lateral rotation thereof, and the V-shaped cutting away of the floating weight opposite the swivel to provide for greater play in the stylus lever during its vibration. In other respects, reproducer No. 2 is identical with the reproducer which I made in 1901.



In each of these reproducers the horizontal axis on which the stylus lever was vibrated by the record, was at right angles to and intersected by a prolongation of the axis of the swivel or horizontal rotation member. It was found by further experimentation by myself and others that the reproducer was considerably improved, and that there was considerably less tendency to break down the walls between the record grooves when the vertical axis was moved toward the hinge of the reproducing weight as the amount of rotation in order to permit a given amount of lateral play of the reproducer stylus was reduced in proportion to the distance to which this axis was moved away from the horizontal axis and towards the hinge of the reproducer floating weight, and eventually it was determined that the best results were secured by the construction which was ultimately embodied in the "combination K" reproducer which has been put in evidence on behalf of the complainant herein.

Prior to my work on reproducers and during the years from 1897 to 1900, I was engaged in the manufacture of duplicate phonograph records by use of duplicating machines which operated upon the principle of the pantagraph, a stylus tracking the groove in the master record imparting its vibration to a cutting stylus which cut a similar groove in a smooth blank. We had about two hundred duplicating machines in use in the Edison Phonograph Works during that period. These machines were at first constructed in accordance with a sketch which I have annexed to this affidavit and which is introduced in evidence and marked - "Defendants' Exhibit-Sketch of Orange



Duplicating Machines." The machine which we first used is illustrated in Sketch No. 1. This device made use of a floating weight in which a compound lever bearing a reproducing and recording stylus at its ends was mounted between pivot pins, the cutting stylus being laterally immovable with respect to the weight, while the reproducing stylus was movable laterally as well as being capable of vibration in a vertical plane. The original record to be reproduced was rotated above the floating weight carrying this device the reproducer stylus tracking the groove, and the blank on which the groove was to be cut was rotated beneath it in contact with the cutting stylus in synchronism with the original or master record.

I introduce in evidence one of the levers which was used in these devices during the time mentioned, and the same is marked - "Defendants' Exhibit-Duplicating Machine Lever No. 1." A large number of duplicate cut or engraved records were manufactured in this way during the time I had charge of such manufacture, and the same were sold in large quantities to the public.

After these machines had been use for a year or two, they were modified to correspond with the construction shown in Sketch No. 2. In this construction, the lever was somewhat modified and the floating weight was hung by a pulley secured to one end of the lever by means of a cord hung over a pulley. I herewith offer in evidence one of the levers used in this type of duplicating machine with the designation:

"Defendants' Exhibit-Duplicating Machine Lever No. 2." A large number of cut or engraved duplicate phonograph records



were manufactured with duplicate machines equipped with this device, and the same were sold in large numbers to the public. As high as 14,000 such records were made in this way in one day.

In addition to the devices which I have offered in evidence, I have seen about the works of the Edison Phonograph Works and the National Phonograph Company at Orange, New Jersey, from time to time a number of machines for making cut or engraved duplicate phonograph records, in which the reproducer stylus was provided with a swiveled mounting and was capable of vibration in one plane to follow the irregularities, that is to say, the elevations and depressions of the record groove and was capable of motion in a direction at right angles thereto in order that it might accommodate itself to any lateral malformation in such groove.

Adolph F. Gall.

Sworn to and subscribed before  
me this 28<sup>th</sup> day of July, 1909.

(Seal) Anna R. Klehm  
NOTARY PUBLIC, STATE OF NEW JERSEY  
COMMISSION EXPIRES, JUNE, 1913.



At a Stated Term of the Circuit Court of the United States for the Southern District of New York, held in the Court Rooms thereof in the Federal Building in the Borough Of Manhattan and City of New York, this day of December, 1911.

PRESENT:

HONORABLE E. HENRY LACOMBE,

United States Circuit Judge.

AMERICAN GRAPHOPHONE COMPANY

vs.

NATIONAL PHONOGRAPH COMPANY and  
BLACKMAN TALKING MACHINE COMPANY.

In Equity, No. 4/151.

On Smith Patent No.  
881,831.

FINAL DECREE.

This cause coming on to be heard upon the Bill of Complaint, Answer, Replication, and prima facie proofs; and upon motion of Ralph L. Scott, Esq., solicitor for complainant, counsel for defendants consenting thereto, it is this day

ADJUDGED, ORDERED and DECREED that United States Letters-Patent No. 881,831, entitled "Sound-Reproducer", granted March 10, 1908, upon application of Richard Bartholomew Smith, and assigned by mesne assignments to the American Graphophone Company, complainant herein, is good and valid; and that the said American Graphophone Company is the owner of said Letters-patent and is entitled to maintain this suit; it is further

ADJUDGED, ORDERED and DECREED that the National Phonograph Company and Blackman Talking Machine Company, defendants herein, have infringed upon said Letters-patent, and upon each and every claim thereof, and upon complainant's



rights thereunder; and that complainant is entitled to the usual injunction and accounting, with costs;

The defendants having fully satisfied the complainant in the premises, it is further

ADJUDGED, ORDERED and DECREED that no injunction be issued; that the accounting be waived; and that the taxation of costs in favor of complainant be waived.

---

United States Circuit Judge.

I hereby consent to the filing and entry of the foregoing Final Decree.

*Louis Hicks*

*Solicitor and* Of Counsel for Defendants.

December 22 , 1911.



At a Stated Term of the Circuit Court of the United States for the Southern District of New York, held at the U. S. Court Rooms in the City of New York, N. Y.; on the        day of August, 1909.

PRESENT: E. HENRY LACOMBE, Circuit Judge.

American Graphophone Company,	)	
Complainant,	:	
vs.	:	In Equity
National Phonograph Company	)	Smith Patent No.
and	:	
Blackman Talking Machine Company,	:	881,831
Defendants.	)	

This cause coming on to be heard on the return of the order to show cause why a preliminary injunction should not be granted against the defendants and each of them, as prayed in the bill of complaint, and upon reading the bill of complaint and the affidavits of Charles V. Henkel, P. A. Powers, Paul H. Cromelin and C. A. L. Massie, filed on behalf of the complainant in support thereof, and upon reading the affidavits of Thomas A. Edison, William Pelzer (2), Delos Holden, Walter H. Miller, Alexander M. Pierman, Peter Weber, Adolph F. Gall, Mrs. Julia Devonald, Frederick Ott, John Ott, Edward Morris and Fred Eckel, filed on behalf of the defendants in opposition thereto, and after hearing C. A. L. Massie, Esq., in support of said return of said order to show cause, and Melville



Church, Esq., in opposition thereto, and after due consideration had,

IT IS ORDERED, that the motion for preliminary injunction be and the same is hereby denied.

---

U. S. Circuit Judge.

Approved as to form.

Of Counsel for Complainant.

New York, N. Y.,  
August 1909.



PHILIP MAURO  
S. T. CAMERON  
REEVE LEWIS  
C. A. L. MASSIE

F. A. HOLTON  
SCIENTIFIC EXPERT  
RALPH L. SCOTT

MAURO, CAMERON, LEWIS & MASSIE

COUNSELLORS AT LAW

Patents and Patent Causes

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H-2.

NEW YORK Dec. 19, 1911.

Delos Holden, Esq.,  
Edison Laboratory,  
Orange, N.J.

Dear Mr. Holden:-

AMERICAN GRAPHOPHONE CO. vs. NATIONAL PHONOGRAPH CO. and  
BLACKMAN, On Smith Patent.

In keeping with our telephone talk of this morning, enclosed herewith you will find form of proposed Final Decree; if it meets with your approval, will you kindly affix your consent to the original and return it to this office, retaining the carbon for your files. You will note that the Decree waives the issuance of injunction; it is prepared in this form because I find from Mr. Massie's memo. of the agreement reached between yourself and him that injunction is to be waived.

It is the writer's understanding that you are to prepare at once the form of license under the Smith Patent which your Company desires from the Graphophone Company, and, as soon as the form of license has been settled upon and executed by the Graphophone Company, that we will receive a check for \$1500.00. I will add that Mr. Powers is very anxious to have the matter closed up this week, if possible.

With kindest regards, I am,

Yours very truly,

S-H.

*Ralph L. Scott*



Smith Patent 881,831

Fig 1

Defendants' Structure

Fig 2

UNITED STATES CIRCUIT COURT  
SOUTHERN DISTRICT OF NEW YORK

AMERICAN GRAPHOPHONE COMPANY,  
COMPLAINANT,  
VS.  
NATIONAL PHONOGRAPH COMPANY,  
AND  
BLACKMAN TALKING MACHINE COMPANY,  
DEFENDANTS.

IN EQUITY

DEFENDANTS' EXHIBIT SKETCH OF:  
GRILL SWIVEL REPRODUCER OF 1901.

